

**IN THE CLAIMS:**

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1, 6, 8-10, and 13 without prejudice or disclaimer, and AMEND claims 2-5 and 12, in accordance with the following:

1. (CANCELLED)
2. (CURRENTLY AMENDED) ~~The blade-type optical transmission apparatus as claimed in claim 1, further comprising~~A blade-type optical transmission apparatus, comprising:  
a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;  
a blade enclosure in which said plurality of main-signal blades are enclosed;  
a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between each two adjacent ones of the main-signal blades; and  
a bypass blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and partitions the ring connection provided by said back plane.
3. (CURRENTLY AMENDED) ~~The blade-type optical transmission apparatus as claimed in claim 1, further comprising~~A blade-type optical transmission apparatus, comprising:  
a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;  
a blade enclosure in which said plurality of main-signal blades are enclosed;  
a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein

the two-fiber ring connection has two fibers connecting between each two adjacent ones of the main-signal blades; and

a through blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and allows a through passage of a main signal inside said through blade as the main signal is exchanged with said back plane.

4. ~~(CURRENTLY AMENDED) The blade-type optical transmission apparatus as claimed in claim 1, further comprising~~A blade-type optical transmission apparatus, comprising:  
a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;  
a blade enclosure in which said plurality of main-signal blades are enclosed;  
a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between each two adjacent ones of the main-signal blades; and

a power blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and amplifies a main signal exchanged with said back plane.

5. ~~(CURRENTLY AMENDED) The blade-type optical transmission apparatus as claimed in claim 1, further comprising~~A blade-type optical transmission apparatus, comprising:  
a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;  
a blade enclosure in which said plurality of main-signal blades are enclosed;  
a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between each two adjacent ones of the main-signal blades; and

a joint blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and exchanges a main signal, exchanged with said back plane, with a back plane of another blade-type optical transmission apparatus.

6-11. (CANCELLED)

12. (CURRENTLY AMENDED) ~~The blade-type optical transmission apparatus as claimed in claim 1,~~ A blade-type optical transmission apparatus, comprising:

a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;

a blade enclosure in which said plurality of main-signal blades are enclosed; and

a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between each two adjacent ones of the main-signal blades;

wherein one of the main-signal blades provides at least one of a function to partition the two-fiber ring connection inside said one of the main-signal blades, a function to allowallows a through passage of a main signal inside said one of the main-signal blades as the main signal is exchanged with said back plane, and a function to amplify a main signal exchanged with said back plane.

13-15. (CANCELLED)

16. (PREVIOUSLY PRESENTED) A blade-type optical transmission apparatus, comprising:

a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;

a blade enclosure in which said plurality of main-signal blades are enclosed;

a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between two adjacent main-signal blades; and

a bypass blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and partitions the ring connection provided by said back plane.

17. (PREVIOUSLY PRESENTED) A blade-type optical transmission apparatus, comprising:

a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;

a blade enclosure in which said plurality of main-signal blades are enclosed;

a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between two adjacent main-signal blades; and

a through blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and allows a through passage of a main signal inside said through blade as the main signal is exchanged with said back plane.